

## Township and Village Enterprises in China-Growth Mechanism and Future Prospects

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# **Township and Village Enterprises in China-Growth Mechanism and Future Prospects**

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## **Abstract**

The development of Township and Village Enterprises (TVEs) has been an important reason for China's high growth rate. This paper considers the performance of TVEs to date and reviews their prospects for future growth. The paper pays particular attention to their unusual institutional character. Often, the ownership arrangements are dismissed solely as an impediment to further growth. This approach does not sufficiently explore the reasons why TVEs have achieved such high growth rates with property rights that contradict mainstream thinking. This paper points to some similarities between TVEs and the stylised Japanese firm which allowed it to achieve high growth rates.

## **1. Introduction**

A number of Asian countries have experimented with rural enterprises as a vehicle for development. However, perhaps none have been as successful as China where rural enterprises have grown at an exceptional rate since economic reforms were instigated in 1978. The number of rural enterprises has increased at an average annual rate of around 17%. The average annual rate of growth in real gross output value has been about 25%. The increasing importance of rural enterprises is also reflected in official statements. For example, Deng Xiaoping, in his 1992 southern tour speech, referred to rural enterprises as one of the three advantages of socialism with Chinese characteristics. More recently Jiang Zemin, when inspecting agriculture and rural industries in 1996, suggested that "developing township enterprises is a revolutionary reform in rural construction and is of far-reaching significance"<sup>1</sup>. The paper reviews the contribution which rural enterprises have made to China's economic development focusing on the Sunan model which originated in southern Jiangsu and the Yangzi delta. The reason for this is that, although other regional variants have emerged – the most well-known being in Guangdong (in the Zhujiang delta, southern Guangdong) and Wenzhou (in southern Zhejiang), historically the Sunan model has been the dominant ownership form. In most parts of China, but particularly in the more developed regions rural non-agricultural development has followed the Sunan model.

The most interesting feature about the Sunan pattern is its unusual ownership

structure. There is a strong sense of collective ownership and close ties between the township and village enterprise (TVE) and township and village government (TVG). A common argument in the literature is that TVEs' ambiguous ownership rights are an impediment to further reform. This view has widespread acceptance and has been the driving force behind moves to convert TVEs into joint stock companies. This paper, however, puts forward an alternative perspective that there are some positive features in less than arms-length ties between TVEs and TVGs pointing to some similarities with the Japanese firm. It is set out as follows: The next section gives a brief account of the historical evolution of TVEs and outlines some stylised facts. The performance of TVEs and the pros and cons of TVEs' ownership arrangements are presented in section three. Following this, the prospects for further growth and some of the main problems confronting TVEs in the future are considered in section four. The final section contains some brief concluding comments.

## 2. Historical Evolution and Stylised Facts

### *Historical Evolution*

The Sunan model has its origins in the Great Leap Forward. The predecessors to TVEs were commune and brigade enterprises (CBEs) which were first set up in 1958. CBEs were collectively-owned and controlled within the commune structure which consisted of the commune, brigade and production team. In southern Jiangsu they were mainly involved in the production of small farm machinery, chemical fertilisers, construction materials and simple processing of agricultural products. From the beginning the communal character of CBEs was emphasised in terms of ownership, control and surplus redistribution. The commune was responsible for the culture, work and education of the peasants. The economic and political fortunes of CBEs depended to a large extent on the ebbs and flows in government policies. The gross output value of CBEs in 1958 was six billion yuan but, in the aftermath of the failure of the Great Leap Forward, most CBEs were closed down when the Central Committee and State Council jointly issued a document stating that communes and brigades should not establish enterprises<sup>2</sup>. In 1961 the gross output value of CBEs fell to 1.96 billion yuan. It is well known that statistics on gross output value in the Great Leap Forward are not too reliable, so we have to be cautious. Nonetheless, the magnitude of the difference (over four billion yuan) is at least suggestive.

By the mid-1960s, however, a number of CBEs were re-established with the help of urban workers who had returned to the countryside following the Great Leap Forward. Associated with this, the gross output value of CBEs also started to increase. For example, in 1965 in Wuxi County alone, in Jiangsu, the gross output value of CBEs was 5.6 million yuan (Whiting 1995 p. 91). The Cultural Revolution was a period of significant growth for CBEs. Most commentators seem to accept that, although government statements applauding their growth did not appear until later, the seeds for CBE/TVE development were sown in this period. The North China Conference in 1970 is commonly considered to be a turning point. In 1970 the gross output value of CBEs was 6.4 billion yuan. At the (official) end of the Cultural Revolution in 1976, the gross output value of CBEs had increased to 24.4 billion yuan. The annual rate of growth in CBE output value for 1958-1970 was 54%, but

for 1970-1978 the annual growth rate was just over 25% (Islam 1991 table 1).

Southern Jiangsu was a natural place for CBEs to develop. The region has a strong agricultural and industrial base. Textile and food processing industries developed using raw materials provided by the agricultural sector. The periodic influx of "sent-down" workers, cadres, and urban youth throughout the Cultural Revolution provided technical skills, management experience and a network of connections. A concentration of major urban industrial sectors provided opportunities for CBEs to enter into contracts with state firms. These firms were also an important source of second hand equipment and other resources. In some counties such as Wuxi CBEs were especially encouraged. An important factor was that "in Wuxi the collective organisational structure of the commune and brigade were more prominent features of the lives of rural residents than elsewhere in China" (Whiting 1995 p. 90). The prominence was the result of the scale of resources controlled at the commune and brigade level. The start-up capital for many CBEs came from revenue generated by collective agriculture and accumulated at the commune and brigade level. In turn CBEs generated significant revenue for the commune. By the mid-1970s communes in Wuxi derived as much as 40% of their income from CBEs (Perkins 1977 p. 224) and much of this was reinvested in CBEs. As Perkins (1977 p. 225) points out: "In the most developed places [communes] were using their new-found income not only to reinvest in more sophisticated industry, but also to stimulate new programs in the levels below the commune".

There are different interpretations on the scope of, and reasons for, the growth in CBEs during the Cultural Revolution. For example, one view is that power struggles in the central government meant that most of the control over local issues fell to local governments in this period. The local governments in some provinces, such as Jiangsu in particular, took advantage of this to set up enterprises. The local governments then protected these "underground enterprises", even though they were not officially encouraged, because they were important sources of revenue. This view places emphasis on the fact that in some quarters CBEs were regarded as "the tail of capitalism" (Islam 1991 p. 690) and hence frowned upon. A different perspective, which Wong (1991) stresses, is that the central government pursued deliberate policies of decentralisation and promotion of CBEs. She argues that substantial state resources were given to local governments to finance rural industrialisation throughout the Cultural Revolution. Wong (1991 p.184) suggests: "[a]lthough some of the investment funding for rural industry was raised locally, outside the state sector, the share of total investment financed by state funds was surprisingly large". Nevertheless, even if the centre did promote CBEs it is difficult to be sure about whether the support was active or passive. Ronnas (1993 p. 228) argues "that the support of the central level for rural industrialisation was essentially of a passive nature. It consisted primarily of moral incentives and of the creation of an overall economic environment that was conducive to such development. Active support in the form, for example, of rural credits was of minor importance. Indeed such support on a large scale would have run counter to the strategy of 'walking on two legs'". However, the statistics give some support to Wong's position that promotion was pro-active. The centre's budgetary expenditure increased throughout the Cultural Revolution. For example, between 1971 and 1975 the centre's expenditure was 212.5 billion yuan, compared with 153.8 billion yuan during the previous five years (Prime 1991 p. 198). Of the

centre's total expenditure Wong (1991 pp. 186-187) estimates that in the period 1966-1978 as much as 35 billion yuan was made available for rural industrialisation in the form of designated sources alone<sup>31</sup>. When various sources of informal investment-eg. replacement and regeneration (*gengxin gaizao*) funds and the different forms of diverting enterprise profits are taken into account<sup>41</sup> this figure becomes much larger.

In the 1980s, CBEs became a significant part of the local economy in southern Jiangsu. By 1990 officials in Jiangsu estimated that rural enterprises produced 90% of the province's industrial output (*Beijing Review* 27 August-2 September 1990 p. 18). In addition rural enterprises in southern Jiangsu produced 90% of the area's gross product (Martellaro 1994 p. 348). It was the most prominent CBE province and from the mid-1980s the ownership structure of CBEs/TVEs in Jiangsu was viewed as a model which was copied in other coastal provinces, the interior provinces and finally even some of the more remote parts of western China. Associated with this there have been several government statements affirming the role of CBEs/TVEs and encouraging their growth. The "Provincial Regulations on the Growth of CBEs", issued in 1978, permitted and encouraged the growth of CBEs, gave CBEs greater control over production and marketing, reduced or abolished taxation of CBEs and encouraged state-owned enterprises to assist and co-operate with CBEs. In 1983 the State Council issued guidelines which affirmed that "commune and brigade enterprises belong to the co-operative economy and great efforts must be made to continue to consolidate and develop such enterprises". When the commune structure was dismantled in 1984, CBEs were renamed TVEs. When the name was changed the State Council issued a circular stating: "Vigorous efforts should be made to guide TVEs in terms of orientation and development... TVEs should receive the same treatment as state-owned enterprises (SOES) and are entitled to all necessary state aid". In 1984 the State Council's Document 4 formalised the political and legal status of TVEs which enabled them to obtain bank loans as legal persons. Following this in 1985 the State Science and Technology Commission launched the Spark Programme to promote the transfer of managerial and technological knowledge from the "modern sector"—the research institutes and large SOEs—to TVEs.

With the exception of rural enterprises in Fujian and Guangdong who benefited from an "open door" policy earlier than rural enterprises in other provinces, for most of the 1980s rural enterprises served primarily local and domestic needs. However, when the coastal development strategy was adopted in 1988, TVEs in Jiangsu and other coastal regions were given incentives to promote exports and utilise foreign investment similar to those given earlier to rural enterprises in southern China. As a result many TVEs in the coastal regions became major exporters. This reflected a more general trend where TVEs became more outward looking in the mid to late 1980s particularly in the more developed regions. World Bank research conducted in 1986-87 in four counties—Wuxi in Jiangsu, Jieshou in Anhui, Shangrao in Jiangxi and Nanhai in Guangdong—confirms this. For example, in Wuxi just 4% of TVE sales were within the home township and 82% of TVEs sold less than 20% of their output in their home county. In all four of the counties large majorities of firms sold at least 40% of their output outside their home province (see Svenjer & Woo 1990).

### *Stylised Facts*

Most TVEs are set up by townships or villages. A common view is that the

residents of the township or village, which establish the TVE, own the firm, but the residents do not have the privileges of ownership — ie. the right to transfer, use or appropriate the assets. Hence, as one commentator in the *China Daily* suggests: “In rural enterprises sponsored by local communities such as townships or villages, the property rights belong to the whole community but no individual in particular”<sup>51</sup>. The ownership rights in the TVE are executed through communal representatives — the TVG. The TVG has a pivotal role in setting up the TVE and, at least in the initial stages, exercises tight control over most TVEs. TVEs, for this reason, are sometimes considered to be TVG run enterprises but, at times, TVGs act more as if the TVE belonged to them rather than the local residents. The situation is also complicated in some TVEs which claim to be collectively-owned but, in fact are operated by individual entrepreneurs. The property rights in these TVEs are not clear because, in most cases, the entrepreneurs received initial authorisation from the TVG to use the land and/or assistance from the TVG to raise capital. The issue of who owns the assets of the TVE is muddled in situations like this. The entrepreneur benefits from his/her relationship with the TVG, but the value of the TVE’s assets often outweighs the value borrowed from, or with the help of, the TVG.

The unusual nature of the TVE makes it hard to pinpoint the residual claimant. Perhaps the best view is that both the local residents and the TVG are joint residual claimants. For example, Chang & Wang (1994) point out that about 40% of TVE profits are paid to the TVG in the form of fees. These fees benefit both the TVG and the local residents. The fees benefit the TVG because part of the fees are used to support its running costs. The rest of the fees support communal social welfare programs and infrastructure projects which benefit the township-village residents. The other 60% of profits are retained in the TVE to finance further development. The local residents seem to benefit most from TVE development because, *inter alia*, existing jobs are made more secure and more job opportunities are created. The control rights in the initial and intermediate period rest with the TVG. Weitzman & Xu (1994 p. 69) suggest that the TVG is regarded as the representative of the residents and, as such, is best seen as the *de facto* executive owner of the TVE. Chang & Wang (1994) liken the part played by the TVG, in the initial stages, to a direct managerial role. “[The TVG] will choose or approve projects, raise or help raise funds, mobilise manpower and other resources within its jurisdiction to support the project and supervise the construction process” (Chang & Wang 1994 p. 437). However, at an operational level the control rights, in most cases, shift to managers and workers in the TVE.

Song (1990) describes this process through drawing an analogy between the TVG and the TVE and the father-son relationship. The TVG exercises more control in the TVE’s early life, but as the TVE grows up it assumes more responsibilities. The TVG maintains managerial veto, but in the normal running of the TVE it adopts a back seat role.

As a result, over time, TVGs become “profit oriented economic entities that might be compared with holding companies, investment corporations, or headquarters of loosely controlled multi-divisional corporations” (Byrd & Lin 1990 p. 5). While casual empiricism suggests that in most TVEs, managers and skilled workers assume much of the control rights over time, the TVG still retains ultimate control because throughout the TVE’s life the TVG retains the power to appoint managers.

Byrd & Lin (1990 pp. 5-6) sum this up:

“Although day-to-day management and business decisions are usually left to enterprise directors, community governments tend to be intimately involved in decisions on important investments, the establishment or dismantling of firms, significant changes in product lines [and] the appointment of enterprise management ... community governments can also absorb risk for subordinate community enterprises and can finance investments... through... sources of funding such as bank loans”.

This passage suggests that managers in TVEs can be seen as representing local governments, while being given substantial independence in managerial decision making. Viewed in this light Gang (1993 p. 57) suggests that the managers of TVEs resemble executives in market economies, while TVGs are similar to a board of directors. However, the relationship between the board of directors and the company in a capitalist market economy is different from that between TVGs and TVEs in some important respects. One of the differences is that TVGs play a role in income distribution and, on the whole, the control which the TVG exercises over the TVE is associated with the TVG's redistributive role. To this end the TVE serves as a vehicle for the social welfare policies of the TVG. This takes at least three forms. The TVE is a source of revenue for the TVG through taxation and profit remittances, the TVE is a source of employment for the local residents and TVGs make short-term transfers between TVEs to ease structural problems in times of stagnation.

The managerial operations of the TVE are market-oriented. By 1986 70% of the main material inputs of rural enterprises were purchased through the market, and over two-thirds of their output was sold at market determined prices (Singh 1993 p. 27). While TVGs make transfers between TVEs, local budget constraints are relatively hard. In TVEs which have adopted the “manager contract system” managers have well specified compensation schedules which stress market criteria. The contract is normally an agreement specifying the manager's independence and his/her obligations to turn over profits to the TVG. Schadler (1990 p. 231) estimates that in 1985 90% of collective enterprises had become contract enterprises. Gang (1993) sampled 630 collective and non-collective rural enterprises in Sichuan and Zhejiang in 1991. He reports (at p. 56) that 42% of the total sample and 86% of the collective enterprises were contracted out to either managers or management staffs. While there have been various criticisms of the contract system, there is widespread agreement that in TVEs run under contract, managers are less subject to local government interference and are in a better position to defend the TVE's interests (see eg Schadler 1990 pp. 230-232).

Gang (1993) also presents evidence which suggest that there is a fairly clear distinction between the market and redistributive functions of TVEs. He found that for the sample as a whole the support of local government was not as important as economic determinants such as the availability of skilled workers, the professional expertise of managers and funds, technologies and personal training provided by state enterprises. This supports the view that, first, rural enterprises are fairly market-oriented—for example they give strong considerations to product marketability when deciding whether to enter into a particular kind of business and second, rural

enterprises enjoy considerable autonomy in business decision making, although the decision to establish the enterprise in the first place is usually made by the TVG. However, Gang (1993) also found that local governments have more influence on business decisions in collective rural enterprises relative to non-collective rural enterprises. For example, he found that local government support and the availability of bank loans were more important to collective than non-collective enterprises.

### 3. Performance and Interpretations on TVE Institutions

#### *Activities and Performance*

In terms of employment and gross output TVEs are mainly engaged in industrial production. For example in 1995, industry accounted for almost 75% of gross output and nearly 59% of people working in TVEs. TVEs are engaged in some heavy industries such as coal and electricity, but most are engaged in light industries such as building materials, clothing, farm tools, fertilisers, leather products, machine building, paper products and textiles. The commerce and food services sector is also fairly important. When the reforms were instigated in 1978 just 8% of TVEs were involved in this sector, but in 1995 the figure was 38.8%. In 1995 it accounted for 16.3% of the TVE labour force and 9.3% of gross output. The third sector is construction. In 1995 only 4.8% of TVEs were in construction with 15.1% of the labour force. It produced just over 9% of TVE output. Finally, agriculture is of marginal significance. In 1978 32.5% of TVEs and 21.5% of the TVE labour force were in agriculture. Relative to industry the gross output value in 1978 was low, but it was still 7.3% of the total. However, in 1995, only 1.3% of TVEs and 2.4% of people working in TVEs were in agriculture. Agriculture produced 1.5% of total TVE output. Moreover, each year since 1978 TVEs have accounted for 5% or less of agricultural gross output value suggesting that they are of marginal importance in that sector. However, in construction and industry the situation is different. In construction, TVE share has increased from 17.3% in 1980 to 31.5% in 1985 and 66.7% in 1995. The rate of growth in the proportion of industrial gross output produced by TVEs is similar. TVEs were responsible for 9.9% of gross output value in 1980, but in 1985 this figure had grown to 18.8% and in 1995 it was 56.1%.

TVEs have grown at a phenomenal rate. Their growth performance is outstanding when compared with the rest of the (developing and developed) world. Table 1 gives some selected statistics on TVEs which illustrate their growing importance. The statistics are from 1985 to avoid artificially inflating the growth rate<sup>61</sup>. Between 1985 and 1995 the number of TVEs grew at an average rate of 17.1%. The number of people working in TVEs has grown at an annual rate of 8.4% and the value of fixed assets in TVEs has grown at an annual rate of 27.6%. The growth in annual real gross output value between 1985 and 1995, consistent with the statistics given above was 25.8%.

TVEs seem to be as efficient as private firms which have well-defined property rights. For example, Svejnar (1990) runs a series of regressions using pooled panel data from 400 TVEs and private firms in four Jiangsu counties over a 16 year period. He used ownership dummies to distinguish between TVEs and private firms. The co-efficients on the ownership dummies were statistically insignificant, suggesting



**TABLE 1**  
**Selected Statistics for TVEs 1985-1995**  
**Average Annual Growth Rates**

CATEGORY	1985-1986	1986-1990	1990-1995	1985-1995
Number of Enterprises	62.65	9.07	4.94	17.10
Number of Workers	17.14	6.02	6.65	8.36
Original Value of Fixed Assets	28.33	24.15	30.15	27.63
Real Gross Output Value	17.10	13.21	34.51	25.80

SOURCE: Statistical Yearbook of China (various years).

NOTES: Gross Output values were deflated using industrial Gross Output Value implicit price deflators. From 1984, below village categories were added to township (xiang) and village (cun) level enterprises. Figures are not given for before 1984 to avoid artificially inflating growth rates.

that "private ownership and community ownership appear to have similar effects of productivity" Svejnar (1990 p. 253). Pitt & Putterman (1996) reached similar conclusions in a more recent exercise. They pooled data on 200 TVEs and private firms distributed over 10 provinces from 1984 to 1989. These results suggest that TVEs are as efficient as private firms. However, even if it is going too far to draw detailed conclusions on the basis of the few studies so far, it is clear that ownership did not

**TABLE 2**  
**TVEs**  
**Regional Share of Employment and Gross Output Value**  
**(expressed in percentage terms)**

YEAR	EASTERN		CENTRAL		WESTERN		CENTRAL & WESTERN.	
	G.O.V	EMP.	G.O.V	EMP.	G.O.V	EMP.	G.O.V	EMP.
1980	65.0	47.1	30.2	34.5	4.8	18.4	35.0	52.9
1985	63.2	53.0	31.9	32.2	4.9	14.8	36.8	47.0
1990	64.9	49.3	30.7	35.3	4.4	15.4	35.1	50.7
1991	65.7	60.2	30.1	27.4	4.2	12.4	34.3	39.8
1992	66.4	51.5	29.2	32.9	4.4	15.6	33.6	48.5
1993	64.2	47.3	30.6	16.9	5.2	16.0	35.8	52.7
1994	69.4	52.3	23.0	34.2	7.6	13.5	30.6	47.7
1995	66.7	50.9	23.0	32.6	10.3	16.5	33.3	49.1

NOTES: (i) The eastern zone covers Beijing, Tianjin, Hebei, Liaoning, Shanghai, Jiangsu, Zhejiang, Fujian, Shandong, Guangdong, Hainan and Guangxi. The central covers Shanxi, Inner Mongolia, Jilin, Heilongjiang, Anhui, Jiangxi, Henan, Hubei and Hunan. The western zone covers Sichuan, Guizhou, Yunnan, Shaanxi, Gansu, Qinghai, Ningxia and Xinjiang. (ii) Tibet is excluded because of lack of data, (iii) GOV=Gross Output Value (iv) EMP.=Employment (v) The 1980 figures for EMP are for 1981 and, (vi) The 1980 figures are for xiang and cun level enterprises—for explanation see notes to table 1.

SOURCE: Calculated from statistics in Statistical Yearbook of China (various years).

matter in these samples.

The contribution of TVEs varies across regions. Table 2 shows regional shares of TVE employment and gross output value for 1980, 1985 and 1990-1995. The eastern zone share was constant at around one-half of total employment and two-thirds of total gross output for most of the period. This is in spite of the fact that it has only about 40% of the population (41% in 1995-Statistical Yearbook of China 1996 p. 70). The central zone had around one-third of rural enterprise workers and produced just under one-third of total gross output for most of the period, although this figure fell in 1995-1996. Finally, about 15% of people working in rural enterprises were in the western zone; however, over the period it only accounted for around 5% of total rural enterprise gross output, increasing to just over 10% in 1995. The central government is aware of the regional disparities in TVE development and has taken steps to deal with it. Jiang Zemin, at the CPC fourteenth Party Congress in October 1992, signalled the introduction of new measures when he stated: "We shall continue to devote great efforts to developing township enterprises and *particularly support those in central and western regions and in minority national regions*"<sup>71</sup>. Following this statement, the State Council, in February 1993, issued a "Decision on Accelerating the Development of Township Enterprises in Central and Western Regions". This document detailed plans to allocate an annual figure of 5 billion Yuan, between 1993 and 2000, to support TVE development in the central and western zones. The document contains a range of preferential measures – set out as nine policies – which are designed to accelerate the development of TVEs in these zones. The document directs banking institutions in the central and western zones to increase their lending to TVEs as a proportion of total loans and requires that local financial departments set aside funds for TVE development. The statistics in table 2 which are up to the end of 1995, do not shed much light on its effect. This reflects the fact that there has not been sufficient time to this point to determine the effect of this document on regional differences in TVE development. The central and western zones' share of rural enterprise gross output value increased in 1993, but it fell in 1994. It increased again in 1995, but the figure was still less than the 1993 share. The fall in 1994 was due to a decline in the central zone share, although the western zone share increased. While, at the time of writing no statistics are available for 1996 so it is impossible to be sure, casual observation nevertheless suggests that the document has started to have an effect on performance across the zones during 1996 and 1997. China's central and western regions grew faster than the eastern region during January-May in 1996. Growth in investment in capital construction and technological renovation (year on year) was 15.6% in the central region, 13.41% in the western region and 6.85% in the eastern region. Between January and June 1996 the industrial value added in the central zone increased by 107.2 billion yuan which was 30.5% higher than the corresponding figure for January to June 1995. This was 7.8% higher than the eastern zone and 6% higher than the growth rate in the western zone.

### *Interpreting TVE Institutions*

A lot of reservations have been expressed about the ambiguous nature of TVE property rights. For example, an article in Nongmin Ribao (Farmers' Daily) which is attributed to the Ministry of Agriculture, states: "Ownership is shared by everybody, while no-one is responsible for the enterprise; responsibilities for property rights

are unclear, and so are the respective responsibilities for administrative duties and enterprise management. [Moreover] rural administrative leaders frequently interfere arbitrarily with enterprises”<sup>8)</sup>. The same sentiment has been expressed in many academic articles. For example, Hong (1995) suggests (at p. 360) “under collective ownership everybody owns the property [which] actually means nobody owns [it] and nobody cares as well”. These concerns have resulted in widespread support for the view that TVEs should be converted to joint stock companies if further growth is to occur. Weitzman & Xu (1994) estimate, on the basis of personal interviews conducted in 1992 and 1993, that in Guangdong joint stock companies accounted for about 8% of TVEs. Joint stock companies in Zhejiang at the end of 1994 accounted for one-eighth of TVEs (Hong 1995 p. 359). In May 1995, according to the Ministry of Agriculture, there were 204,000 share holding TVEs which was 12.4% of total TVEs.<sup>9)</sup> These figures are quite low, although, the number of share holding firms is increasing all the time and, as a result, the proportion is likely to be much higher now. For example, one report suggests that, at the end of 1996, 66,300 or 70% of total TVEs in Jiangsu had been transformed into joint stock forms, leasing arrangements or options.<sup>10)</sup> However, focusing on the introduction of joint stock companies seems to overlook two important points. The first is the success which TVEs have had and, to a significant extent, continue to have with unusual ownership rights. The second is the theoretical issue of how to design a workable mechanism which is faithful to the basic tenets of individualistic property rights. Most academic and official writings blame conflicting responsibilities and managerial interference on the fact that the relationship between TVEs and TVGs is not well-defined. While these issues, at times, can present problems, and perhaps do need to be remedied through introducing joint stock companies, what is often overlooked is that the reasons for the success TVEs have had might be found in the same informal ties. Focusing only on the problems vaguely-defined property rights present does not explain how TVEs have managed such high growth rates.

In this respect, there are similarities in the growth mechanism of the TVEs and the stylised Japanese firm (J-mode). An important J-mode feature is that the major stake-holders – external financing entities, shareholders and workers – make a long-term commitment to the firm. Aoki (1990) argues that this promotes productive efficiency because it cushions the firm from the full rigour of financial and labour markets. To put it in different terms, the planning time horizon of the external financial entities, in general, tends to be longer in the J-mode than in the unionised American firm. This is conducive to collective learning or continuous incremental technical change in productivity growth. Lo (1997) points out that there are similarities in the institutional structure of SOEs and the J-mode in terms of promoting incremental innovation: Hence, he suggests (at pp. 91-92) “the rigidities characteristic of China’s reformed enterprises, particularly in terms of low labour mobility and close government-enterprise ties, though detrimental to allocative efficiency, might have been conducive for productive efficiency”. This statement is also applicable to TVEs. First, while TVEs are flexible in the labour and product markets, the close relationship between TVEs and TVGs means that lenders are more willing to make long-term commitments in the financial market. Ho (1994 p. 125) points out that, in Jiangsu, if a TVE is unable to service its loan, the common practice is for the TVG to transfer the debt to another, or to several other enterprises under its control. While allocative

inefficient, long-term commitment fosters productive efficiency through providing a cushion for incremental innovation and learning through networks. The late industrialisation literature suggests that this is the basis for the successful adoption, adaptation and improvement of imported technologies and hence economic growth (see eg Amsden 1989, Best 1990, Lazonick 1991, Lo 1997). The Japanese have adopted, adapted and improved on existing imported technologies since the Meiji period. Since the introduction of the economic reforms China has followed a similar path, through encouraging foreign investment in allocated areas. Imported technologies and associated rapid structural change have been a prominent characteristic of Chinese growth in the reform period (see Lo 1997 chap. 3). While this growth pattern has not been restricted to TVEs, it has been a prominent feature in downstream consumer durable industries where TVEs have been widespread.

A second feature common to the J-mode and TVEs is that there is no pressure from shareholders for dividends. In the Japanese case shareholders are treated as a group outside the firm like banks. This means that in the J-mode, emphasis is placed on growth rather than short-term profit. In the case of TVEs the residents do not have rights to dividends.

Hence, once the TVG has met its obligations in terms of its social welfare function, it is able to retain most of the after-tax profits inside the TVE to finance further growth. One estimate which Ho (1994 p. 123) gives is that in the Sunan region in Jiangsu, in the first half of the 1980s, most TVEs reinvested 50% to 60% or more of retained profits. The results of a joint SSB and People's University study of 200 rural enterprises in 10 provinces suggests that this is a conservative estimate. The firms in the sample, most of which were TVEs, reinvested between 79% and 93% of retained earnings in 1985 (see Zhou & Hu 1987 p. 142). This is similar to the capital-centred system in Japan where most of the capital is reserved inside the firm to finance further expansion. A well-known fact is that compared with firms in other advanced capitalist countries, the dividend to profit ratio in Japanese firms is much lower (see eg Odagiri 1994, Zhai 1997 pp. 17-18).

Third, both the J-mode and TVEs exhibit a high ratio of debts. There are obvious potential costs in having a high debt ratio. Attempts to reduce high levels of debt among TVEs has been one of the major reasons behind the push for more joint-stock companies. Similarly, concerns about bad debts in light of lower growth rates in recent years has underpinned calls for reforming the Japanese financial system. However, high levels of debt have also been consistent with high growth rates. Without a high level of borrowings, given the relative scarcity of funds, it is unlikely that TVEs would have grown at such a rapid rate. The same is true of Japan. For example in the period of substantial growth, between 1956 and 1970, 300 billion yen, the cumulative deficiency of total enterprise accounts, was made up in entirety by the surplus funds of residents' accounts through "deposits→bank loans" (Zhou & Hu 1987 p. 122).

#### **4. The Prospects for Future Growth**

Most forecasts suggest that TVEs will continue to grow in importance and numbers. For example, a working conference on TVEs held in September 1993 set a

target gross output value for TVEs for the year 2000 of 7,600 billion yuan. This would represent a five-fold increase over the gross output value in 1992. The industrial gross output value is also expected to grow to 5,400 billion yuan where the figure for 1992 was 1250 billion yuan. Nevertheless, most official statements about the future prospects for TVEs emphasise that for further growth to be meaningful, the problems TVEs face need to be addressed. In addition to concerns about ownership rights, a number of non-institutional problems with TVEs such as product duplication, failure to maximise scale economies and perceived adverse effect on the environment have arisen.

### *Product Duplication and Failure To Maximise Scale Economies*

A common criticism of TVEs is that they do not maximise scale economies. There is excessive duplication in some industries. The textile industry is a prominent example where TVE participation is high. However, two points need to be made. The first is that duplication is not restricted to TVEs. Duplication is a manifestation of decentralisation or what Qian & Xu (1993) term the "M-Form" structure. With the M-Form structure, the Chinese economy is organised into a multi-layer-multi-regional form according to the territorial principle, in which each region, at each layer, can be regarded as an operating unit. This means that regions tend to be self-contained and self-sufficient. This also means that firms tend to be small and industries less concentrated. Thus, both firms and goods are duplicated across regions. The second point is that whether duplication is, in fact, a problem is not clear. While there are costs associated with duplication such as inefficient use of scale economies, there are some potential benefits. For example, Qian & Xu (1993 p. 28) point out that duplication might reduce vulnerability to external shocks and increase the reliability of supplies under uncertainty. A related point which Goodhart & Xu (1995 p. 22) make is that duplication facilitates technology diffusion between firms and across regions.

In addition, the benefits and costs of the M-Form structure also need to be considered. With decentralisation, the major responsibilities of local governments revolve around regional development and welfare. The local government has to raise revenue on its own and, therefore, has a strong incentive to set up and support local enterprises for revenue generating purposes. There are, of course, potential costs in this process—for example if local governments engage in non-co-operative games to externalise costs to other localities, but there are also pluses. The limited resources of local governments makes it hard for them to bail out loss-making TVEs. While it is difficult to verify this seems to be the reason for harder budget constraints in the non-state sector compared with the state-owned sector. The M-Form has also been important in encouraging regional development. It fosters a horizontal relationship between regions which facilitates regional competition and imitation. The regional governments compete with each other to see which can increase incomes the fastest. The M-Form also provides an avenue for regional governments to mimic the successful development strategies of other regions.

### *Inferior and Poor Quality Goods*

TVEs have been criticised on two related grounds in terms of product standard. The first is that the standard of the goods which TVEs produce is poor. The second

is that TVEs attempt to pass off inferior products as “famous brands” in a fraudulent manner. While these issues present problems, neither appears to be restricted to TVEs. Actual evidence beyond casual empiricism is limited, but the evidence that does exist suggests that the standard of TVE output is about on a par with the state-owned sector. For example, the State Economic Commission, in 1987, studied 800 firms to see whether state standards were being met. The investigation found that, in large SOEs 90% of the goods met the state standard. This figure was higher than in TVEs where 78.3% of goods met state standards, but the weakest performers were small to medium size SOEs where 72.8% met specified standards<sup>11</sup>. It is also worth pointing out that the government has taken some steps to deal with concerns of fraud and inferior product design. While enforcement is, at times, problematic, a legislative framework is in place to deal with both fraud and failure to meet recognised standards. This appears to be having some effect on lifting standards. It was reported that in 1996 more than 22,000 TVEs passed the State quality control inspections. It was also reported that more than 1000 TVEs have adopted internationally recognised quality-control measures and standards<sup>12</sup>. The legislation is not perfect, but it needs to be remembered that similar difficulties with inferior goods have arisen in Eastern Europe where mass privatisation occurred often without sufficient consumer protection legislation.

### *Environmental Issues*

There has been some concern expressed about the effects rural industrialisation is having on the environment. For example Findlay et al (1994 p. 186) state: “The scattered nature of the growth taking place and the lack of effective pollution controls, has resulted in a deterioration [in] the quality of soil, water and air”. There is a fair bit of anecdotal evidence to support this claim, but the extent of the problem, at an empirical level, is not clear. When enterprises in the same industry were compared in the mid-1980s it was found that those in rural areas emitted ten to twenty times more pollutants than those in urban areas<sup>13</sup>. In addition, in the mid-1980s one-third of the water surfaces in three industrialised regions in south Jiangsu (Suzhou, Wuxi and Changzhou) was polluted with water at or below grade five, and most of the water in Wuxi County (one of three counties in the Wuxi region) was below grade four<sup>14</sup>.

A survey, which was conducted by the Chinese Academy of Sciences in 1988, found that pollution was particularly severe in two areas where TVEs are concentrated – southern Jiangsu and Shanghai<sup>15</sup>. But, at least one study suggests that the actual number of TVEs which are serious offenders in Jiangsu, the larger TVE province, seems to be comparatively small. A comprehensive survey of Jiangsu's TVEs, during 1989, identified just 3.8% of the firms as “serious” polluters (and a further 28.5% as “light” polluters)<sup>16</sup>.

Moreover, a slightly more recent World Bank survey conducted in 1991 indicates that rural firms accounted for only 10.7% of waste water discharges, 9.4% of air emissions, and 11% of solid wastes. This is below their share of industrial output (World Bank 1992). However, as Ody (1992 p. 20) points out, this in part reflects the greater concentration of TVEs in light industries and their limited presence in the chemical and smelting industries which are the leading sectors for waste water discharges. There is some evidence to suggest the situation has also improved in the last

few years. In 1996, for every 10,000 yuan of growth in industrial output value, the levels of solid, liquid and atmospheric wastes were 57 tons, 31,500 cubic metres and 1.57 tons - down 52%, 50% and 50% respectively from 1990.<sup>17)</sup> Thus reports suggest that TVE pollution is a problem, but there is conflicting empirical evidence on its extent.<sup>18)</sup>

## 5. Conclusion

While problems exist which might hinder further development, the discussion of a few of the main wider problems in the last section is inconclusive. The reason is that the extent of the problems are not clear. We are restricted to making cautious judgements on the limited evidence that is available. In the end, while we cannot conclude whether TVEs will continue to grow at the same rate, what is clear is that, on balance, TVEs have been successful to this point. While the evidence is at best sketchy, most of the problems that TVEs present appear to mirror difficulties facing other enterprises. The standard of goods produced and concerns about the effect on the environment are two examples. This is not to suggest that these problems should be ignored, but it does recognise that the process of post-socialist transformation is a difficult one. The fact is that it takes time to get consumer and environmental protection legislation in place and, once it is in place, to iron out the difficulties. A point made above is that most (if not all) of the countries in Eastern Europe, which pursued rapid privatisation, are facing similar consumer and environmental protection issues. This suggests that these problems raise broader issues for post-socialist transformation.

However, most of the literature suggests that TVEs' ambiguous ownership rights present the most serious obstacle to further growth. Hence, it is almost accepted without question that moving TVEs to a share holding basis is the only path forward. The speed at which TVEs are being converted to joint stock companies might mean that, in practice, the issue becomes irrelevant. This said, it remains that any genuine attempt to understand the institutional character of TVEs has to come to terms with why they have worked to this point with ambiguous property rights. The view that TVEs would have performed better in the past, or will perform better in the future as joint stock companies, overlooks the fact that TVEs have outperformed firms with better-defined property rights in Eastern Europe. This paper has attempted to point to one explanation for their rapid growth through pointing out some similarities between the TVE and J-mode which suggest some benefits in the TVE-TVG relationship.

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## Footnotes

- 1) Jiang Zemin's comments are reported in Nongmin Ribao, Beijing, in Chinese, 10 December 1996 p. 1. Text reproduced in Summary of World Broadcasts, Part 3, Asia and the Pacific February 15 1997.
- 2) "A Decision Regarding the Development of Rural Forestry and Agricultural Subsidiary Production"-see further Whiting (1995 p. 86).
- 3) This figure is calculated as follows. Wong (1991 pp. 186-187) estimates that (i) state grants under the categories of special funds for the five small industries and aid to people's communes contributed 7 billion yuan, (ii) special allocations during the fourth Five-Year Plan (1970-1975) for building key projects in the five small industries-chemical fertilisers, farm machinery, iron and steel, cement and energy-contributed 8 billion yuan, and (iii) bank loans providing working capital contributed 20 billion yuan.
- 4) See Wong id: 187-191 for elaboration on "informal methods".
- 5) Xi Mi "Who Really Owns the Township Enterprises" China Daily June 6, 1994, p. 4.
- 6) The definition of TVEs changed in the statistics from 1984. From 1984 below village categories (such as private firms) were added to township (xiang) and village (cun) level enterprises. Although xiang and cun level enterprises are dominant in terms of gross output value.
- 7) This statement is reported in Jing Wei "Township Enterprises Boom in Ethnic Minority Areas" Beijing Review December 20-26 1993.
- 8) PRC Ministry of Agriculture "A View on Reforms in the Property Rights of Town and Township Enterprises as at April 1 1994" [Text], Beijing, Nongmin Ribao (in Chinese) April 14 1994 p. 4, "Article on Rural Enterprise Property Rights" FBIS-CHI-94-097 May 19 1994.
- 9) Zhongguo nongcun jingji (August 1995).
- 10) Zhonghua Gongshang Shibao (China Industry and Commerce Times) March 19 1997 p. 4
- 11) "100 Million Will Shift From Farming to Industry" China Daily September 4, 1987 p. 1
- 12) "Township Firms Propel China's Economic Growth" China Daily February 15 1997 p. 4.
- 13) Xia Zifen (ed) Shanghai xiangzhen qiye jingji keji fazhan zhanlue he zhengce wenti yanjiu (Research on Problems Concerning the Strategy and Policy for the Economic and Technological Development of Township and Village Enterprises in Shanghai) (Shanghai: Shanghai shehui kexue yuan chubanshe, 1988) p. 53 referred to in Ho (1995 p. 375).
- 14) Yan Yinglong "Lun Sunan xiangzhen gongye fazhan zhong de huanjing baohu wenti" (On the Problems of Environmental Protection in the Process of Rural Industrialisation in Sunan) Jiangsu jingji tantao (Jiangsu Economic Inquiry) 1988 no. 6 p. 29 referred to in Ho (1995 p. 375).
- 15) "Polluting Industries Endanger Rural Areas" China Daily October 13 1988 p. 3
- 16) Xinhua December 5, 1990, referred to in Ody (1992 pp. 20-21).
- 17) "Township Firms Propel China's Economic Growth" supra note 12
- 18) Given the conflicting evidence, more research is needed. A nationwide survey of TVE. pollution levels was scheduled to take place in late 1996. This will update the previous studies mentioned in the text and provide data to the National Environmental Protection Agency to be used to implement further pollution controls-see Liu Yinglang "Pollution by Township Firms to be Investigated" China Daily April 12, 1996 p. 2.



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